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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,928	03/02/2004	Ulrich Eggert	P400347	3248

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EXAMINER

LE, DAVID D

ART UNIT PAPER NUMBER

3681

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*He*

**Office Action Summary**

Application No.

10/790,928

Applicant(s)

EGGERT ET AL.

Examiner

David D. Le

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 10-16, and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 10, 11, 14-16 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/02/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This is the first Office action on the merits of Application No. 10/790,928, filed on 02 March 2004. Claims 1-4, 6, 10-16, and 18-22 are pending.

### Documents

2. The following documents have been received and filed as part of the patent application:

- Foreign Priority Document, received on 03/02/04
- Information Disclosure Statement, received on 03/02/04

### *Election/Restrictions*

3. Applicant's election of Species B (Fig. 4), claims 1-4, 6, 10-16, and 18-22, in the reply filed on 22 September 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### *Drawings*

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plane in which the intermediate shaft is in gearing connection with the second input shaft must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should

describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

#### *Claim Objections*

7. Claim 6 is objected to because of the following informalities:
- Lines 4-5, "wherein the loose wheels of the gear sets in the gear sections are shifted by means the mutual synchronizing mechanisms" should be --wherein the loose wheels of the gear sets in the gear sections are shifted by means of the mutual synchronizing mechanisms--.

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the first gear section (Fig. 4, element 1) to include only even-numbered forward gears and the second gear section (Fig. 4, element 2) to contain only odd-numbered forward gears, does not reasonably provide enablement for the first gear section to include only odd-numbered forward gears and the second gear section to contain only even-numbered forward gears. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Claim 11 recites the limitation “wherein the first gear section does not comprise any gear sets for even-numbered forward gears and the second gear section does not comprise any gear sets for odd-numbered forward gears.” Claim 11 is a dependent claim and it is dependent upon dependent claim 10 and independent claim 1.

However, the independent claim 1 specifically defines, “a second gear section in which the intermediate shaft is connectable to the second output shaft by means of the second group of gear sets.” The present specification (Fig. 4) discloses a total of two gear sections (Fig. 4, elements 1 and 2) and identifies the claimed second gear section as element 2 of Fig. 4 because it is the only gear section that includes the intermediate shaft (8). The present specification (Fig. 4) also discloses that the second gear section (Fig. 4, element 2) contains only odd-numbered forward gears (1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup>) and the first gear section (Fig. 4, element 1) contains only even-numbered forward gears (2<sup>nd</sup>, 4<sup>th</sup>, and 6<sup>th</sup>). Clearly, the claimed recitation of the claim 11 contradicts the independent claim 1 and the present specification.

Accordingly, as set forth above, the present specification does not adequately support the claimed invention as defined in claim 11.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. **Claims 2-3 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 2:

- Lines 4-5 recite “a plane in which the intermediate shaft is in gearing connection with the second input shaft.” Since there are infinite number of planes that intersect the gearing connection between the intermediate shaft and the second input shaft, it is unclear which plane that applicant is referring to.

Claim 3:

- Claim 3 recites the limitation “wherein the second gear section comprises the second group of gear sets, at least one of these gear sets being positioned in front and at least one of these gear sets being positioned behind the gearing connection when viewed in the direction of the intermediate shaft.” It is unclear which direction of the intermediate shaft that applicant is referring to as “in front” and “behind”.

- Line 3 of claim 3 recites “the gearing connection”. It is unclear which gearing connection that applicant is referring to in direction of the intermediate shaft.

Claim 14:

- Line 5 recites the limitation "the reverse gear". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. **Claims 1-4, 6, 10, 14-16, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 3,916,711 to Hoyer.**

Claims 1-4, 6, 10, 14-16, and 18-22:

**Hoyer** (Figs. 1-4; column 3, line 66 – column 7, line 8) discloses a change gear transmission comprising:

- A first input shaft (i.e., Fig. 1, element 5);
- A second input shaft (i.e., Fig. 1, element 55);
- A first output shaft (i.e., Fig. 1, element 19);
- A second output shaft (i.e., Fig. 1, element 42);



- A drive shaft (i.e., Fig. 1, element 31) that is in torque transmitting connection with the first and second output shaft;
- A intermediate shaft (i.e., Fig. 1, element 66);
- A first gear section (i.e., Fig. 1, element 6) in which the first input shaft (5) is connectable with the first output shaft (19) by means of a first group of gear sets (i.e., Fig. 1);
- A second gear section (i.e., Fig. 1, element 7) in which the intermediate shaft (66) is connectable to the second output shaft (42) by means of a second group of gear sets (i.e., Fig. 1);
- Wherein the intermediate shaft is in gearing connection with the second input shaft (i.e., Fig. 1);
- A first drive pinion (i.e., Fig. 1, element 30) provided on the first output shaft;
- A second drive pinion (i.e., Fig. 1, element 43) provided on the second output shaft;
- Wherein the number of second gear sets in the second gear section is at least as high as the number of first gear sets in the first gear section (i.e., Fig. 1);
- A plurality of loose wheels (i.e., Fig. 1, elements 20-23, 49, 57, 73, and 77) being part of the first and second gear sets;
- A plurality of mutual synchronizing mechanism (i.e., Fig. 1, elements 24, 25, 28, 39, 47, 51, 63, and 74);
- Wherein the plurality of loose wheels of the gear sets in the gear sections are shifted by means of the mutual synchronizing mechanisms (i.e., Fig. 1);

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- A first clutch (i.e., Fig. 1, element 4);
- A second clutch (i.e., Fig. 1, element 65);
- Wherein a motor shaft (i.e., Fig. 1, element 1) is connectable by means of the first clutch with the first input shaft that is connectable with the first output shaft;
- Wherein the motor shaft is connectable by means of the second clutch with the second input shaft that is positioned in coaxial relation to the first input shaft, and said second input shaft is connected to the intermediate shaft by means of the gearing connection;
- Wherein the second gear section includes a reverse gear set (RK) in which a fixed wheel (i.e., Fig. 1 element 48) is connected to a loose wheel (i.e., Fig. 1, element 50) by means of a intermediate gear (i.e., Fig. 1, element 49) rotatably borne on a hollow shaft (i.e., Fig. 1, column 5, lines 25-30);
- Wherein the gearing connection between the intermediate shaft and the second input shaft includes gears on both shafts and an intermediate gear (i.e., Fig. 1);
- Wherein A hydrodynamic coupling (i.e., Fig. 1, element 2) inherently includes a pump shaft connected to a motor shaft and provided coaxially with the first input shaft;
- Wherein the change gear transmission is capable of being a manual change gear, an automatic change gear, or a power shift gear for a motor vehicle; and
- Wherein the change gear transmission can be installed in lengthwise or transverse orientation in a motor vehicle.

*Allowable Subject Matter*

14. Claim 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hoyer (U. S. Patent No. 3,897,699) discloses a change gear transmission as shown in Figs. 1-4.
- Berger et al. (U. S. Patent No. 6,874,381) discloses an actuating arrangement for a gearbox as shown in Fig. 5.
- Bulgrien (U. S. Patent No. 6,845,682) teaches a smoothly shifting multispeed transmission as shown in Fig. 1.
- European Patent No. EP001130291A1) teaches a six-speed countershaft transmission as shown in Figs. 1-3.
- European Patent No. EP001124079A2) teaches a six-speed countershaft transmission as shown in Figs. 1-6.

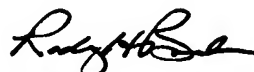
16. Examiner notices the set of amended claims, filed on 22 September 2005, fails to comply with 37 CFR 1.121 (C) (2). To expedite the examining process, Examiner views it as a bona fide attempt to advance the prosecution of the instant application and considers the claims as set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ddl

  
**RODNEY H. BONCK**  
**PRIMARY EXAMINER**  
**ART UNIT 3681**